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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/614,118

07/11/2000

David W. Cannell

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EXAMINER

SHEIKH, HUMERA N

ART UNIT

PAPER NUMBER

1618

MAIL DATE

DELIVERY MODE

10/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/614,118	CANNELL ET AL.	
	Examiner	Art Unit	
	Humera N. Sheikh	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30, 47-50 and 52-56 is/are pending in the application.
- 4a) Of the above claim(s) 1-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30, 47-50 and 52-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>07/22/08</u> | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: _____ |
|---|--|

DETAILED ACTION

Status of the Application

Receipt of the Request for Continued Examination (RCE) under 37 CFR 1.114, the Amendment, Applicant's Arguments/Remarks, and the Information Disclosure Statement (IDS) all filed 07/22/08 is acknowledged.

Claims 1-30, 47-50 and 52-56 are pending in this action. Claims 30 and 47 have been amended. Claims 31-46 and 51 have been cancelled herein. Claims 1-29 have previously been withdrawn (based on non-elected invention). Claims 30, 47-50 and 52-56 are rejected.

* * * * *

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 22 July 2008 has been entered.

* * * * *

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 07/22/08 has been considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 30, 47-50 and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisotzki *et al.* (hereinafter “Wisotzki”) (U.S. Pat. No. 4,900,545).

Wisotzki (‘545) teaches a method for the regeneration of hair split-ends and for caring for and revitalizing mistreated hair, comprising applying to the hair, a treatment composition comprising mono- or disaccharides, more especially, the pentoses (5 C-atoms) and hexoses (6 C-atoms), and also the disaccharides derived from the pentoses and hexoses (see reference column 1, line 49 through col. 2, line 49).

Wisotzki teaches that the mono- or disaccharides are any aldoses and ketoses or their mixtures. Wisotzki further teaches that suitable monosaccharides include glucose, mannose,

galactose, ribose, arabinose, xylose, fructose and sorbose, while suitable disaccharides include sucrose, lactose, maltose and cellobiose (col. 2, line 36-49). Also suitable are naturally occurring or technical mixtures wherein the mentioned mono- or disaccharides are predominant. Glucose is used as an example, in this instance.

The treatment preparations are in the form of aqueous solutions or emulsions, which may be formulated into shampoos or permanent wave setting lotions (cols. 3 and 5-6). Wisotzki teaches that the sugars are present in the composition in percentages ranging from 0.1% to 8% by weight (col. 2, lines 24-30). This range clearly meets, encompasses and overlaps with Applicant's claimed range of 0.01% to 5.00% (as in instant claims 30 & 52). Moreover, the determination of suitable or effective amounts is within the level of one of ordinary skill in the art, carried out by routine or manipulative experimentation to obtain optimal results, as these are variable parameters attainable within the art. Furthermore, generally, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

The instant invention is drawn to a method of protecting a keratinous fiber from extrinsic damage, comprising application of a composition comprising xylose and derivatives thereof, whereby xylose is present in a range from 0.01% to 5.00%.

Wisotzki teaches a method drawn to hair treatment and caring of mistreated hair and in particular, a method for regenerating, revitalizing or repairing hair comprising applying mono- or

disaccharides, more especially the pentoses and hexoses, and in particular, teach that monosaccharides such as xylose are suitable for their composition to impart beneficial results (*i.e.*, hair revitalization) (see claim 10). The reference also teaches inclusion of additional sugars such as for instance, glucose, mannose, galactose, sorbose and fructose, which sufficiently meets the additional sugars claimed in instant claims 47-50. Wisotzki further teach effective amounts of the sugars can be used, such as from 0.1% to 8% by weight (see claim 2). Wisotzki teach at col. 6, lines 3-5, that, "in every case, it was found that the hairs had been regenerated, *i.e.*, the split-ends had been partially repaired."

Moreover, with regards to Applicant's claimed "method of protecting a keratinous fiber from extrinsic damage", it is the position of the Examiner, that the teachings of Wisotzki are sufficient to render the instant method obvious because Wisotzki teaches treating and revitalizing hair that has been damaged (*i.e.*, such as by chemical treatments) and teaches applying the same sugar (*i.e.*, xylose) in the same amount (0.1-8%). Thus, it can be reasonably expected that since the composition taught by the prior art is comprised of the same constituents in the same amounts, the prior art's composition would also be fully capable of imparting the same effects and results, such as protection against extrinsic damage. Hence, the instant invention, when taken as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, given the teachings of Wisotzki delineated above.

* * * * *

Response to Arguments

Applicant's arguments with respect to claims 30-56 have been considered but are moot in view of the new ground(s) of rejection.

▪ **Rejection under 35 U.S.C. over Wistozki (USPN 4,900,545):**

Applicant argued, "Applicant's note that Wistozki uses a C₆ sugar (glucose) in the examples and mentions in column 2, lines 47-49 that glucose is preferably used in the composition for repairing split ends. Wistozki's disclosure of sugars fails to disclose any of the unique benefits of applicant's claimed sugar and the skilled artisan would not have been motivated to select a non-preferred sugar and use it a the claimed method, and as such, the Examiner can not support a *prima facie* case of obviousness based on the cited references."

These arguments have been considered but were not rendered persuasive. Applicant's argument that the "C₆ sugar glucose is exemplified by Wistozki" was not persuasive since the teachings of the prior art are not limited solely to the examples exemplified therein, but rather, the teachings of the prior art as a whole are taken into consideration. In this instance, Wistozki vividly suggests and teaches a method for hair treatment that comprises application of monosaccharides, of which xylose is explicitly included and taught to be useful. Even further, the reference teaches use of the sugars in amounts ranging from 0.1% to 8% by weight (see claim 2), which is a range that clearly meets, overlaps and encompasses Applicant's claimed range of 0.01% to 5.00% (as in instant claims 30 & 52). In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re*

Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Also see *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Applicant's argument that "Wisotzki's disclosure of sugars fails to disclose any of the unique benefits of applicant's claimed sugar" was not deemed persuasive. Wisotzki expressly teaches inclusion of the same sugars (i.e., xylose) as that employed by Applicant. Thus, it would be reasonably expected that beneficial properties and characteristics would also be imparted therein based on the use of the same sugars taught by the reference. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Regarding Applicant's argument that "the skilled artisan would not have been motivated to select a non-preferred sugar", this argument was not found persuasive. Wisotzki teaches that various sugars, such as pentoses, hexoses, mono- and disaccharides, as well as mixtures can be used (col. 2, lines 36-49). Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971).

For these reasons, Applicant's arguments were not found persuasive.

Conclusion

-- No claims are allowed at this time.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Humera N. Sheikh whose telephone number is (571) 272-0604. The examiner can normally be reached on Monday-Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley, can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Humera N. Sheikh/

Primary Examiner, Art Unit 1618

hns

September 26, 2008

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